Vol 9 No 3, September 2025
ABDI DOSEN
Jurnal Pengabdian Pada Masyarakat
pISSN: 2614-6509
eISSN: 2620-5156

DESIGNING LEARNING ANIMATION ASSETS FOR GENIORA SAYABISA JUNIOR HIGH SCHOOL LEVEL

Talitha Aurellia *, Eko Sugiarto
Seni Rupa, FBS, Universitas Negeri Semarang
Jl. Taman Siswa, Sekaran, Kec. Gn. Pati, Kota Semarang, Jawa Tengah 50229, Indonesia
Email: thaaurellia@gmail.com

Abstract

The development of information technology in the era of the Industrial Revolution 4.0 has transformed learning systems into more digital ones, especially since the COVID-19 pandemic hit, leading to the implementation of distance learning. However, the lack of interaction and engaging visualizations has resulted in a decline in students understanding and interest in learning. As one of the companies operating in the education sector, Geniora offers a solution through its product SayaBisa, which is now being developed for junior high school students. This study aims to design effective animated assets as visual learning media to support educational content. The method used is practice-based research, supplemented with literature reviews and visual studies, culminating in the creation of the final work. The results indicate that animated assets not only serve an aesthetic purpose but also function as communicative and educational message-delivery tools. Thus, the designed educational animations provide an enjoyable solution in the era of digital learning.

Keywords: Animation Assets, Asset Design, Learning Animation, Digital Educational Media, Practice-Based Research

INTRODUCTION

An era in which changes occur in various fields through the massive integration of technology is widely recognized as the Fourth Industrial Revolution (Industry 4.0). The rapid advancement of technology and information necessitates the ability to meet the demand for conveying messages through visual means. With visual presentations, audiences can more easily absorb the information presented, such as photos, videos, illustrations, and animations. However, visual communication is not the sole focus of problem-solving; it requires supporting elements to reinforce the information being conveyed. In this context, visual reinforcement can be derived from text, movement, interaction, and other elements related to problem-solving in design.

One of the revolutions related to information that refers to this visual aspect has not only impacted technology, but also education, which is currently focused on teaching and learning innovation. The learning process is designed and implemented by successful teachers who create quality education (Drouin et al., 2013). In learning, the interaction between teachers and students is one aspect that has changed, as this interaction is now moving toward digital formats,

Submitted: August-2025 Received: August-2025 Available online: September-2025

not just face-to-face in the classroom. The consequence of this is the need for appropriate learning strategies, such as developing models, innovating, and evaluating, so that both teachers and students can achieve their goals and maximize results (Nur et al., 2019).

The recent phenomenon of innovation in teaching and learning has been further driven by the impact of the Covid-19 pandemic. Schools have been closed and distance learning has been promoted. Therefore, both educators and students are required to work together to solve learning problems using new learning tools, such as Zoom, Google Meet, Google Classroom, and so on. While these applications have provided significant assistance, they have not yet proven fully effective in improving the quality of learning. One reason for this is the reduced quality of material presentation compared to face-to-face learning.

This decline in quality can be attributed to factors such as minimal interaction between educators and students, lack of access, and learning tools that are not sufficiently supportive. As a result, many companies offering services in the field of education have begun to emerge. These companies specialize in online learning, including applications, digital posters, educational videos, tutoring, and so on. One of these is animation. Animation is a field that combines art and technology in a synergistic way, making the subject appear lively and colorful (Soenyoto, 2017). Good animation can help students form mental images of the processes occurring and require learning efforts. Thus, animation can serve as an effective instructional tool. The desired outcomes heavily depend on educational animation, as user-centered design plays a crucial role in creating effective educational animation (Utami, 2011).

Similarly, Geniora is one of the subsidiaries of PT. Multitech Infomedia. This company, which operates in the field of digital-based education, holds a prominent position in the fields of technology, education, and the creative industry. Geniora offers a range of products designed to support digital-based learning for Indonesian children, including Geniora SayaBisa, Geniora Mobile, Geniora NuMotion, and Geniora Junior. Among these products, Geniora SayaBisa is the primary focus for providing interactive learning experiences for elementary school students and is currently being developed for middle school students.

This study aims to design animated assets that will be used in educational animations for Geniora SayaBisa at the junior high school level. These animations will contain learning materials to support the teaching and learning process both inside and outside of school. Therefore, the design of these animated assets will be tailored to the junior high school level so that they can become effective and engaging learning media.

IMPLEMENTATION METHOD

Practice-based research will be used as a method in this study, which involves placing researchers within the space and scope of the research itself (Surya Wardana, 2023). As stated by Malin, Ure, and Gray (1996), practice-based research is one of the most suitable research methods in design because the information and knowledge obtained can be directly applied to the relevant work. The creation of the work is also natural and fluid because it is based on mutual agreement among the relevant actors (Hendriyana, 2022). In the book Artistic Research, it is stated that practice-based research positions the subject, who is the researcher or artist, within the object of research. This principle is called “in and through” because creating art

requires a strong process of understanding and ongoing interaction (Hannula et al., 2005). Using this method makes art not just the final result but also a process of thinking. So, knowledge can be gained through practice-based research and the results of that research itself.

This practice-based research process will include literature research, visual research, and practice (Abdullah, 2010). In this process, literature research or library studies are used as references for related data sourced from research journals, books, learning materials, the internet, and previous documents owned by Geniora SayaBisa as references for creating animation assets and reports. Meanwhile, visual research will be conducted based on field observations of the Geniora SayaBisa Junior High School Level Production Team, storyboard design, image documentation, and everyday objects as references to facilitate the discovery of essential forms that can become the distinctive characteristics of an asset's original form. Once the data from literature and visual research is complete, the next step is the practice phase, which is the actual process of creating the work. This begins with presenting the storyboard as the foundation for creating the animation assets, designing the animation assets using Adobe Illustrator software, and conducting reviews and quality checks as the finalization stage before the assets are ultimately processed into animations.

RESULTS AND DISCUSSION

Obtaining information and descriptions of an activity, individual, or event based on a particular perspective constitutes an observation (Nasution A.F., 2023). Based on the observations conducted, it was found that the Geniora SayaBisa Junior High School Level Production Team is responsible for the curriculum materials for grades 7, 8, and 9 of junior high school. This includes everything from the instructional materials to the final product, which is an educational animation video focused on three subjects: Mathematics, Sciences, and Social. Each subject has material that will be discussed using language that has been adapted by the Material Team to make it lighter and easier to understand. This is because the summaries of these materials must be applicable to daily life to make it easier for students to understand the material.

In addition to material, visual assets are one of the important things in animation production. According to the Indonesian Language Dictionary (KBBI), an asset is something that holds value or utility, whether in terms of information or aesthetics. Meanwhile, visual refers to something related to the sense of sight in the form of images, objects, or elements. Therefore, it can be said that visual assets in animation refer to a series of objects in the form of images, designs, or visual elements that can move and carry aesthetic and informative value. Furthermore, visual assets can also serve as the image and identity of a company (Kartika & Wijaya, 2015). In this context, one of the key visual assets in animation is the character. In addition to its blue and orange branding, Geniora SayaBisa has three main characters that represent the company: Pipo, Lula, and Bol.

Figure 1. Main characters Pipo, Lula, and Bol

Source: Geniora

In visual media, characters can convey messages either implicitly or explicitly (Waluyo & Patria, 2022). Characters are an important aspect because they make visual learning easier to understand. The main character is a junior high school student in order to suit the target audience so that students can feel connected. In addition to the main character, Geniora SayaBisa Junior High School Level also features supporting characters related to the three main characters, such as friends and family, who can influence the background of the main character's development. There are also minor characters or one-time characters that can be created from the framework of the main or supporting characters by rearranging or adding elements of assets that can be modified to suit the needs of the learning material.

Figure 2. Characters of Pipo, Lula, and Bol's Family and Friends

Source: Geniora

Unlike Geniora SayaBisa for elementary school level, the style used for characters and environments at the junior high school level can be recognized by its more flexible, harmonious, and vibrant colors that are not childish. In a single shot or episode of educational animation, there are typically not too many colors so that students can focus more on the educational material, which has a higher level of difficulty compared to maintaining color elements as attention-grabbers. The junior high school level style also places more emphasis on simple, neat geometric shapes. The basic shapes adapted refer to rectangles, which have stable and orderly properties, reflecting maturity. Additionally, the use of front, 3/4, or dimensional perspectives is designed with a flat appearance, simple shadows, and rounded corners to make the animation assets look more formal and serious, yet still friendly without an intimidating feel. This is done

to create a style with a slightly mature visual impression, yet without losing its childlike charm, akin to a child just entering middle school. Thus, the visual style used is sufficiently eye-catching. However, it remains fun, cute, and comfortable to look at.

Figure 3. Comparison of The Styles of The Characters Pipo, Lula, and Bol in Geniora SayaBisa Elementary School Level and Geniora SayaBisa Junior High School Level
Source: Geniora

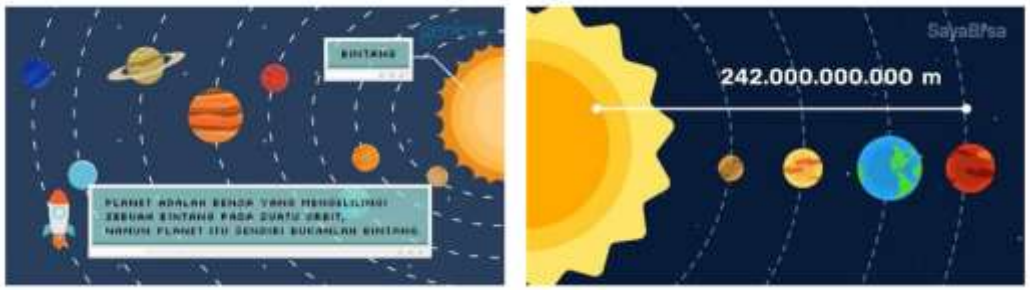

Figure 4. Comparison of The Styles of The Tnvironments in Geniora SayaBisa Elementary School Level and Geniora SayaBisa Junior High School Level
Source: Geniora

Based on research on the style of Geniora SayaBisa Junior High School Level, results were obtained regarding the distinctive characteristics used. This information will then be applied to other objects in life that will be shown in the animation. These objects can be categorized as environment assets. Environmental assets themselves refer to visual elements that serve as the setting or world where characters interact. These include backgrounds, objects, and additional elements that create a specific atmosphere or context, which may represent an identity or the content being conveyed.

Environmental assets are usually tailored to the learning material because they play a key role in conveying the message of the material to be discussed in the animation. They can take the form of living creatures, inanimate objects in everyday life, or elements that can serve as a place for explanatory text. In their creation, objects are simplified using the Geniora SayaBisa Junior High School Level style. However, this simplification must not alter the original characteristics of the objects, ensuring they remain identifiable through their shape, size, depth, transparency, or texture.

Figure 5. Salad
Source: Tania Melnyczuk
(unsplash.com/@alphabetania)

Figure 6. Asset Environment Salad
Source: Personal Documentation

For example, Figure 6 shows the application of the Geniora SayaBisa Junior High School Level style to salad. Salad is a type of food that consists of several types of vegetables or fruits depending on individual tastes. In short, salad is synonymous with lettuce, tomatoes, and eggs. In this case, the first piece of information from the identification of a context is sufficient. Then, lettuce, tomatoes, and eggs are re-identified in their basic form to give a simple impression.

In salad slices, eggs are usually cut in half so that their basic shape, a circle, is retained. Next, there are tomatoes that are cut into several pieces. The shape of the tomatoes can also be simplified into half circles or triangles for variety. It is known that eggs and tomatoes naturally have geometric shapes, making them relatively easy to create based on the Geniora Saya Bisa Junior High School Level style guidelines. However, lettuce has an organic shape, making it quite challenging to identify using only a geometric shape. Therefore, when creating lettuce or other organic objects, a combination of several geometric shapes is required.

When observed, a lettuce leaf has an elongated shape with curly and wavy leaves that widen at the top. This basic shape is quite close to a geometric triangle. The leaves are also zigzagged, resembling a Z shape, which also has a triangular base. In a salad, lettuce is typically separated into individual leaves and enjoyed as is because the leaves are soft and easily foldable, making them easy to eat without needing to be cut. However, in designing assets, one cannot accept raw information and create lettuce as it is in the real world. This behavior can be one of the gaps in perspective, leading to misinterpretation of the information received. Therefore, the lettuce, which can be identified as a triangle, is left to spread out. However, with the shadow of a single lettuce leaf, its shape is too wide compared to eggs and tomatoes in the real world. One trick used is to cut it in half. This way, the lettuce does not cover the entire asset.

After obtaining the basic geometric shape of the salad, it is colored according to the appearance of a real-world salad. Just as eggs have yellow and white colors, tomatoes are red with yellowish seeds, and lettuce is green. The selection of solid colors is not limited to one option but must be accompanied by derivative colors to create variation and a sense of dimension, preventing monotony. Once the simplified components of the salad are established, the next step is to design them into a cohesive whole, typically arranged on a plate in a random yet organized manner. Additionally, details such as sesame seeds or lines resembling branches are added to represent the lettuce's structure, ensuring that the visual information about the

salad's composition is effectively conveyed.

After conducting research and exploring everyday objects in geometric forms, it can be said that the information received about the Geniora SayaBisa Junior High School Level style is sufficient as a basis for creating the next stage of work. The process of creating animation assets begins with an explanation of the storyboard for the material to be presented. A storyboard itself is a visualization of ideas to be developed in the form of a visual script that serves as an outline for a project, presented shot by shot, commonly referred to as a scene (Kunto et al., 2021). During this phase, discussions and feedback take place between the Storyboard Team and the Animation Asset Team to align perceptions regarding the script material that has been translated into a storyboard. This phase is necessary to ensure that any unclear images in the storyboard or discussions about which asset designs might be more suitable as replacements are well-received. Additionally, the discussion phase is useful for explaining the composition and camera movements to be used in the animation, as these can influence the final size and shape of an asset.

Figure 7. Storyboard Explanation Phase

Source: Personal Documentation

The animation set creation process will be carried out immediately after the discussion phase with the Storyboard Team is completed. The execution will be done using Adobe Illustrator software for designing assets, Notion for tracking progress, and Google Drive for collecting the animation assets that have been created. One of the topics discussed is Social Studies learning about Social Interaction. In this episode, it is explained that humans are social beings and will always coexist with others, enabling daily interactions. These interactions can take the form of conversations, greetings, or assistance, as they involve reciprocity in the form of responses. In this episode, there is also an explanation of the five factors of social interaction: imitation, identification, suggestion, sympathy, and empathy, which will be explained through the animated assets that have been carefully designed.

Figure 8. Shot Cut on Storyboard and Final Result of Animation Assets
Source: Personal Documentation

From these shots, it can be seen that there is detailed social interaction between the characters. This episode contains many scenes of the main characters and supporting characters interacting with each other and with their environment. For example, in the first shot, the main characters Pipo and Bol are interacting while lifting a book. As a backdrop, solid colors of blue, brown, and brick red are used, which are actually composed of only a few geometric shapes. However, the presence of small rectangular details in some areas, derived from the colors, indicates that the shot takes place in front of a school wall with windows.

The next shot features a more complex arrangement of assets consisting of images and text. To address this, interactions and important material must be kept within the safe zone to maintain focus and avoid accidental cropping. Based on the shot cuts, a comparison can be seen between the storyboard and the final result, which has been arranged into an animation screen framework. In addition to characters and everyday objects such as books, tables, chairs, and pencils, there are also other assets that serve as supplementary information. One of these is the shadows behind a background character sitting at her desk. Some shadows indicate that there are actually students behind the girl. However, the focus remains on the background character, the girl, as she is one of the message carriers in this episode. Therefore, only she has details and color. Nevertheless, the addition of shadow assets like these completes the information that the shot takes place inside a classroom.

Accompanying them is a female extra without a uniform, with a green background. This information could lead to the perception that the female extra is a teacher standing in front of a blackboard. The action of raising her hand and fingers indicates that the extra is interacting with the extra below her, i.e., explaining. Additionally, there are text elements providing a brief

explanation of the subject matter being discussed, along with torn paper elements that can serve as variations in message delivery to ensure the animation's aesthetic appeal remains engaging and avoids monotony.

Assets that have been compiled into a single shot and arranged into scenes will undergo a review or quality check session. This stage is necessary to check and ensure that nothing is missing, needs to be changed, or added to the animation assets, especially in terms of information delivery. At this stage, revisions are typically made if any imperfections are identified. However, if the reviewed animation assets no longer have any shortcomings in the final layout design, the final asset will be turned into an animated sequence and released as an educational animation episode on the Geniora SayaBisa learning app or YouTube.

Figure 9. Animation Clip from Social Interaction Episode
Source: YouTube Geniora SayaBisa (youtube.com/@GenioraSayaBisa)

CONCLUSION

Participation in the design process of animation assets for Geniora SayaBisa Junior High School Level provided experience and understanding of character and environment assets, which are important elements in animation. The application of geometric style, harmonious color selection, flat impression, and making characters more mature while still maintaining their childishness are choices that have been tailored to the target audience of junior high school students. Each character, whether main or supporting, is not merely designed as decoration but also as a medium for conveying educational content and messages in a communicative manner. Concise and clear explanations of the material, presented in an engaging manner, are essential in a short-duration video. Thus, educational animation can serve as a strategic tool to enhance digital learning.

REFERENCES

Abdullah, R. (2010). Practice Based Research in art and design, Why not. *Jurnal Perintis Pendidikan Fakulti Seni Lukis & Reka UiTM*, *18*(1), 41.

Drouin, M., Hile, R. E., Vartanian, L. R., & Webb, J. (2013). STUDENT PREFERENCES FOR ONLINE LECTURE FORMATS Does Prior Experience Matter? *The Quarterly Review of Distance Education*, *14*(3), 151–162. https://www.proquest.com/scholarly-journals/student-preferences-online-lecture-formats-does/docview/1510292122/se-2

Hannula, M., Suoranta, J., & Vaden, T. (2005). *Artistic Research*. Helsinski: Gothenburg Academy of Fine Art. https://www.researchgate.net/publication/347497267_Artistic_Research_Methodology

Hendriyana, H. (2022). *METODOLOGI PENELITIAN PENCIPTAAN KARYA PRACTICE-LED RESEARCH AND PRACTICE-BASED RESEARCH SENI RUPA, KRIYA, DAN DESAIN – EDISI REVISI* (P. Christian, Ed.). Penerbit Andi.

Kartika, J. D., & Wijaya, R. S. (2015). *LOGO Visual asset development*. PT. Elex Media Komputindo.

Kunto, I., Ariani, D., Widyaningrum, R., & Syahyani, R. (2021). Ragam Storyboard Untuk Produksi Media Pembelajaran. *Jurnal Pembelajaran Inovatif*, *4*(1), 108–120. https://doi.org/10.21009/jpi.041.14

Malins, J., Ure, J., & Gray, C. (1996). *The Gap: Addressing Practicce Based Reaearch Training Requirements for Designers*.

Nasution A.F. (2023). *Metode Penelitian Kualitatif* (Albina M, Ed.). CV. Harfa Creative.

Nur, T., Sekolah, A., Agama, T., & Darunnajah Bogor, I. (2019). STRATEGI PEMBELAJARAN ERA DIGITAL. In *Annual Conference on Islamic Education and Social Sains* (Vol. 1, Issue 2).

Soenyoto, P. (2017). *Animasi 2D*. PT Elex Media Komputindo.

Surya Wardana, A. (2023). PENGEMBANGAN BACKGROUND DATAR MELENGKUNG PADA FILM ANIMASI PENDEK "IN THE PHONE." *JURNAL HERITAGE*, *11*(2), 201–211. https://jurnal.yudharta.ac.id/v2/index.php/HERITAGE

Utami, D. (2011). Animasi Dalam Pembelajaran. *Majalah Ilmiah Pembelajaran*, *7*(1).

Waluyo, V. A. R., & Patria, A. S. (2022). ANALISIS SEMIOTIKA DESAIN KARAKTER SILVERASH PADA GAME ARKNIGHTS. *Jurnal Barik*, *3*(2), 78–88. https://ejournal.unesa.ac.id/index.php/JDKV/